



# UST INFORMATION

---

---

## **SITE ASSESSMENT PROCEDURES FOR ABANDONED (CLOSED IN-PLACE) TANKS**

The following information provides a summary of the site assessment requirements for underground storage tanks that are abandoned (closed in-place). The state of North Dakota has promulgated rules for underground storage tanks; the rules became effective December 1, 1989. The state rules are no more stringent than the Federal Underground Storage Tank (UST) Regulations - 40 CFR Part 280.

The primary purposes of a closure site assessment are to verify that no release has occurred at the facility, or that any release that has occurred has been reported. It is important to keep in mind that notification of a release must occur within 24 hours after the release is confirmed. Obvious contamination should be reported and does not have to wait for confirmation by either field or laboratory tests before the state is notified.

Closure site assessments fall into two categories: 1) sites where the tank is to be removed, and 2) sites where the tank is to be abandoned (closed in-place). The following procedures apply to the second category - tanks to be abandoned (closed in-place).

### **Closure Site Assessment for Tanks to be Abandoned**

It is more difficult to perform an accurate closure site assessment at a site where the tank is to be abandoned because the condition of the tank, the piping the soils and the groundwater cannot be inspected. The following steps are recommended:

1. The facility should be visually inspected to discover any evidence of a spill or release. Particular attention should be paid to the areas around the dispenser islands and the fill pipes.
2. Soil borings should be made around the tanks to intersect any plume that may have resulted from a release. A vapor survey can identify the best locations for the borings. The borings should be screened as they come out, and a sample taken of the soils with the highest readings of contamination. If a vapor survey was not done to locate the borings, it is suggested that two borings be made per tank, one at each end of the tank being closed. In general, borings should be made as close to the tank as possible and at a minimum depth of two (2) feet below the tank bottom. In cases where more than one tank is being closed in-place, please consult the Department for determining the number and placement of soil

borings.

- 2.a. If the tank contained gasoline, the soil from the borings should be screened using a field instrument (e.g., flame ionization detector, photoionization detector, detector tube, etc.). If samples are taken, current accepted practice indicates they should be analyzed for benzene, toluene, ethylbenzene, and xylene (BTEX); total petroleum hydrocarbons (TPH); or both.
- 2.b. If the tank contained any other petroleum product (e.g., diesel, kerosene), the soils should be screened as noted above. If samples are taken, current accepted practice indicates they should be analyzed for total petroleum hydrocarbons (TPH).
- 2.c. If groundwater is present in the boreholes, the water should be screened. Samples should be taken of the most contaminated water. The installation of at least one groundwater monitoring well should be considered, especially when groundwater is 50 feet or less from ground surface. Proximity to a drinking water supply or to a sensitive aquifer makes groundwater monitoring an even more important part of the closure site assessment.
3. If the tank is a hazardous substance tank as defined by U. S. EPA's regulations, the site should be screened for the most toxic substance contained in the tank. A detection reading of any amount of a hazardous substance indicates a release, and the state must be notified.

## **Conclusion**

The approach suggested here does not supercede other existing state or local requirements (state and/or local fire codes). It is intended to provide a preliminary basis for conducting a closure site assessment for tank abandonment (closure in-place).

---

## **NORTH DAKOTA DEPARTMENT OF HEALTH**

### **Regulatory Agency**

North Dakota Department of Health  
Division of Waste Management  
Underground Storage Tank Program  
918 E. Divide Ave., 3rd Fl.  
Bismarck, ND 58501-1947  
Phone: 701.328.5166  
Fax: 701.328.5200  
Website: [www.ndhealth.gov/wm](http://www.ndhealth.gov/wm)